POLIO GLOBAL ERADICATION INITIATIVE

A tool for investigation of Sabin Like 2 (SL2) poliovirus isolation in human or in the environment

WHO Geneva
8 March 2017

World Health Organization

COUNTRY: _____

Investigation of Sabin2 Positive AFP Case, Healthy Person or Environmental Sample Site

The National authority should initiate the detailed investigation within 48 hours of receipt of the notification of SL2 from the laboratory

NOTE:

- **Use dd/mm/yyyy format for date**
- **This form/report should be sent to the National EPI manager / WHO EPI medical officer or as decided by the country team**

Investigation team

No	Name	Organization	Contact address
1			
2			
3			
4			
5			
6			
7			

Date laboratory report received: _____

Date investigation started: _____

Date investigation completed: _____

Date report submitted: _____

1. Location of the case /contact /healthy person/ES site

Province or State or admin1 equivalent area: _____
District or admin2 equivalent area: _____
Sub-district or admin3 equivalent area: _____
Village, township or other: _____
Name and phone number of the community leader_ _____
_____
Other land marks/boundary with/address: _____
_____

Date & type of most recent WPV detected, province/district: _____
Date & type of most recent VDPV detected, province/district: _____
Date & type of most recent Sabine virus detected, province/district:_____

Date of tOPV-bOPV switch: _____
Date of most recent tOPV used through SIA: _____
Date of most recent mOPV2 used through SIA: _____
Current RI schedule: only OPV, only IPV, OPV+IPV

Geo location of the case or environmental site

Latitude: _____Longitude: _____

Map showing the location /Geo location

2. AFP case, contact or healthy person's detail

EPID number/other identifier: _____
Name:_____
Date of birth/Age (m): _____ Sex: _____
Date of onset of paralysis/weakness: _____
Site of paralysis/weakness (If AFP): Rt leg, Rt arm, Lt leg, Lt arm, Other ____

Stool specimen details AFP case/contact/healthy persons

	AFP case	Contact (if positive for SL2)	Healthy person (if positive for SL2)
Date 1st stool collection			
Date 2nd stool collection			
Date 1st stool sent to lab			
Date 2nd stool sent to lab			
Date 1st stool received by lab			
Date 2nd stool received by lab			
Date lab result			
Viruses isolated			
Genetic sequencing (nucleotide difference)			

Vaccination history of AFP case/contact/healthy person

		AFP case	Contact	Healthy person
Routine Immunization	Number of RI OPV doses			
	Number of RI IPV doses			
	Date most recent RI bOPV*			
	Date most recent RI tOPV*			
	Date of most recent IPV*			
	Name of RI centre			
SIAs (prior to stool collection)	Number of SIA doses			
	Date of most recent SIA			
	Date of most recent tOPV or mOPV2 SIA			
Total	Total number of OPV + IPV doses received (RI and SIA)			

*Card or by recall

Primary Immunodeficiency (PID) Screening (Jeffrey Model Warning Signs)

	AFP Case	Contact	Healthy Individual
Four or more new ear infections within 1 year			
Two or more serious sinus infections within 1 year			
Two or more months of antibiotics with little effect			
Two or more pneumonias within 1 year			
Failure to gain weight or grow normally			
Recurrent, deep skin or organ abscesses			
Recent thrush in mouth or fungal infection on skin			
Need for intravenous antibiotics to clear infections			
Two or more deep-seated infections including septicaemia			
A family history of PI			
Total			

Travel history

Did the AFP case/contact/healthy individual travel 30 days prior to the onset of paralysis/weakness? **Yes/No**

If Yes, where? (Explain briefly and give dates as best as possible)

_____

Has AFP case/contact/healthy individual travelled other areas since the onset of paralysis/weakness?

Yes/No

If Yes, where? (Explain briefly and give dates as best as possible)

Did any close family members travel outside of the local area 30 days before onset of paralysis? **Yes/No**

If Yes, where? (Explain briefly and give dates as best as possible)

_____

Were there any recent visitors to the home from outside of the local area in the 30 days prior to the onset of paralysis? Including confirmed or suspected PID individual or IDPs visitor **Yes/No**

If Yes, from where? (Explain briefly and give dates as best as possible)

_____

Others (neighbours or same community members, travel history of pattern, etc.):

_____

_____

_____

3. Environmental sample site details

EPID number/Lab ID: _____
Name of the ES site: _____
Date when this ES started: _____
Frequency of the sample collection: _____
Method of collection: _____
What time of day the sample was collected (Morning, Afternoon):_____
Name of the sample collector: _____
Name of the supervisor: _____

Number of times in past 12 months PV isolated from this site: _____
Number of times in past 12 months NPEV isolated from this site: _____
Number of times in past 12 months Sabine virus isolated from this site: _____
Date of most recent isolation of PV with type:_____
Date of most recent Sabin virus isolated with type: _____

Areas that are drained to this site:

District	Sub-district	Village/settlement	Total population	High risk pop type (if)

Any social event that took place before the sample collection:
If yes, date and description: _____
_____

<u>ES specimen details</u>
Date of ES collection: _____
Date of ES sent to lab: _____
Date of ES received by lab: _____
Date of lab result: _____
Lab result: _____
Genetic sequencing information: _____

4. Search for any containment breach

If the SL2 isolation is found to be directly or indirectly related to a polio laboratory or any human laboratory or a vaccine production facility then a competent virologist, laboratory expert, containment expert should investigate the laboratory or the vaccine facility as applicable (a separate detailed technical investigation may be used as recommended by the GPLN or the containment group).

Findings:

_____

_____

_____

5. Active case search summary

Active case search in the nearby health facility and in the community (use AFP case investigation form of the country to investigate a suspected AFP case found during the search attach a line list of the case(s).

Name of place where AFP case detected	EPID number	Name of AFP case	Date of birth /age	Sex	Date of onset	Date of investigation	Stool specimen collected?
PID* line list (if applicable)							
Name of place where PID case detected	EPID number	Name of PID case	Date of birth /age	Sex	Date of onset	Date of investigation	Stool specimen collected?

A separate case investigation form should be used for full investigation of a suspected AFP or PID case

* Primary Immune Deficiency

6. tOPV & mOPV2 search summary

Conduct a search for tOPV and mOPV2 vaccine as applicable for the area and country including at the health facilities and storage facilities at all levels regardless of the location from where SL2 was isolated. Use a tool attached as Annex 1 to conduct a search for tOPV

Name of place where tOPV/mOPV2 found	tOPV/mOPV2	# unopened vial	# partially used vial	# empty vial	Remarks Observations on vaccine management in the facility in general and also for mOPV2 (if, stock register matched or not, etc.

7. Immunization coverage survey summary among children 6-59 months old

Use a tool attached as annex 2 to conduct the survey

Name of area /cluster	% children received ≥3 OPV doses by card	% children received ≥3 OPV doses by recall	% children received at least 1 IPV /fIPV dose by card	% children received at least 1 IPV /fIPV dose by recall	Remarks

8. Area profile

Province	District	Total population	<15 children	<5 children	OPV3 /DTP3 coverage, last 12 months	IPV coverage last 12 months	OPV /IPV coverage SIA, last 12 months	NPAF rate last 12 months	Stool adequacy rate last 12 months	other	IPV supply situation (number of doses available)

9. Summary of main findings: *[provide bullet list of main findings]*

1._____

2._____

3._____

4._____

5. _____

10. Conclusions: *[provide bullet list of main conclusions, i.e. what can be learned, deducted and concluded by considering the key findings.]*

1._____

2._____

3._____

4._____

5. _____

11. Recommendations and next steps:

1._____

2._____

3._____

4._____

5. _____

Annex 1: tOPV & mOPV2 search survey tool (use one form for each site)

Country_____ Province_____
District_____ Sub district_____
Type of facility: ☐ Health care facility ☐ vaccination centre ☐ medicine shop ☐ vaccine storage facility ☐ other (specify)_____
Name and address of the facility: _____
Name & designation of the contact person or person interviewed: _____
_____

	# un-opened vial	# partially used vial	# empty vial
# tOPV / mOPV2 vial found (circle)			
# of total doses found			
Vial stored in a cold chain? Yes/no			
If not in cold chain, how it is stored?			
VVM status of the vial (good/bad)			
Manufacturer of the vaccine			
Date of received of the vaccine			
Source of the vaccine (Government supply, private market			
Reason for not disposing			
Is the authority willing to dispose the vaccine now?			
Has the vaccine been disposed as per WHO guide*? yes/no			
If disposed, what method used?			
Persons, designation , signature who witnessed of disposal (if) 1. 2. 3.			
Has any compensation given? Two bOPV doses for each tOPV /mOPV2 dose or other, mention, Yes/no			
Has any certification of disposal been given? Yes/no			

*How to handle & dispose tOPV :
http://www.who.int/immunization/diseases/poliomyelitis/endgame_objective2/oral_polio_vaccine/SOPs_tOPV_found_after_the_switch_July2016.pdf

Annex 2: Immunization coverage survey summary among children 6-59 months old (use one form for 10 households in an area or cluster or block)

Methods:

- *Sub divide the infected district or the area into at least three clusters or blocks*
- *Select 10 households randomly from each cluster or block*
- *Assess vaccination status of all children aged between 6 month and 59 months old, by card and history*
- *Select area of residence of SL2 positive case/contact ten households from each cluster randomly*
- *For a district or area with small population, select the infected district or area and take other two adjacent districts or areas for the survey and follow the guide mentioned above*
- *Include children only who are physically present at the time of survey*
- *Do not include visiting children or children from relatives who were not present in the household for the last 6 months*

Country: _____ Province: _____District:_____

Sub-district: _____ Name of the area: _____

Surveyor name and contact number: _____

Name of the head of the household (use one row for each child from the same household)	Name of the children 6-59 months old (physically present at the time of survey)	Age / sex of the child	Number of OPV dose received		Number of IPV or fIPV dose received	
			By card	By history	By card	By history

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